

The National Conference on
Brain Injury: Vancouver 2000

**Comparing Approaches to MTBI
within Canada and in the
UK, the USA and Hong Kong.**

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How do Canada's provinces differ in their approaches to mild traumatic brain injury? Do they ignore it, fight it, compensate it? How do the Canadian approaches compare to neighbouring influences of the United Kingdom, United States and Hong Kong.

A great many people think they are thinking when they are merely rearranging their prejudices.

- William James

Preface

As an advocate for persons who are living with the effects of traumatic brain injury, I have been concerned about our reluctance in British Columbia to recognize that certain individuals with “mild” traumatic brain injuries (those without prolonged reduction in glasgow coma scale, nor prolonged hospitalization or clear neurological science) may not be receiving prompt and appropriate rehabilitation, nor fair compensation. I observed that when such cases result in litigation, the results are unpredictable and the costs to all are very high. There are many of these cases – so many that ICBC developed a special unit to defend these claims. I wondered if it was just our province that was struggling to deal with the issue of traumatic brain injury. I decided that it might be appropriate to conduct a survey of knowledgeable people in the Canadian provinces and Hong Kong and the U.K. and U.S.A. to enquire about their experiences.

Introduction

We all know that there is much controversy and uncertainty surrounding mild traumatic brain injury. This uncertainty extends to the definition, mechanisms of injury, susceptibility of individuals, outcome prediction, therapy and social consequences. This survey consists primarily of contacts with very knowledgeable professionals stretching from Hong Kong to the



United Kingdom, touching down in Canadian provinces and the United States. This survey is by necessity superficial, otherwise would occupy an entire CD Rom. Individuals were selected because of their experience in dealing with traumatic brain injury, its rehabilitation and social and legal consequences. These are exceptional individuals and organizations and should be considered valuable resources for any of you investigating the topic or seeking services for assistance in relation to traumatic brain injury, mild or otherwise in their respective jurisdictions.

This presentation will state certain basic assumptions, proceed through some comparative information on the “systems” involved, and then proceed to individual responses, and finally my conclusions.

Mild Traumatic Brain Injury – Context of November 2000 – How Do We Stand?

Estimates of mild traumatic brain injury in North America have ranged between 131 per 100,000 to at least 2,000,000 occurrences per year in the United States.

- B.P. Uzzell¹

Conservative estimates from 1.3 million MTBI in the United States, as high as 30% to 37% of university and high school students.

- J.F. Malec²

The legal systems in North America are strained by the number of tort claims involved in allegations of severe long term disability following mild traumatic brain injury [ICBC Brain Injury Unit].

There is controversy over the definition of MTBI and whether or not loss of consciousness and reduced glasgow coma scale are essential to the definition. In contrast, the American Congress of Rehabilitation Medicine does not require such loss of consciousness. As well, there are



studies by Hayes, Povlishock and Singha have found mechanisms in which axonal brain injury can occur without loss of consciousness. Controversy is arising as to whether the classification of injuries bears any useful relationship to the persistence of ongoing problems. A number of studies suggest that persistent symptoms are not related either to loss of consciousness or PTA.

- J.F. Malec²

Literature suggests that although MTBI may not require extensive emergency care, even in mild cases a diagnosis of MTBI can be used to initiate important preventative intervention. It is reported that CT scans are ordered for MTBI patients in emergency with focal deficits, potential basal skull fracture, cranial soft tissue injury for age greater than 60. In Newfoundland a physician was found negligent for failing to order a timely CT scan.

- *McLean v. Carr Estate*³

A plethora of studies exist as to predictions for risk of ongoing symptoms following mild traumatic brain injury. Apparently, there is no relationship with previous psychiatric history, however recent research is suggesting there may be genetic predisposition to vulnerability as some persons have a greater evidence of the apolipoprotein e (apo e).

- Malec², Chestnut⁴, Gennarelli⁵, Jordan⁶, Teasdale⁷

Numerous authors have tried but as yet there are not very accurate methods to distinguish amongst patients with a head injury on the basis of motivational or psychogenic factors rather than neurogenic. The presence of alcohol and susceptible personalities, in particular personalities that have been described as “inadequate” have been associated with long term symptoms. However, the differential diagnosis of malingering, psychological disorder or organic brain injury remains inexact. Persistence of symptoms are apparently not related to loss



of consciousness or post-traumatic amnesia, nor have authors been successful in tying them in to litigation neurosis or malingering.

- Malec²

The NIH consensus statements for rehabilitation of persons with traumatic brain injury suggest 2.5 million to 6.5 million individuals in the United States suffer long term results from traumatic brain injury. However, the consensus statement said “mild traumatic brain injury is significantly under-diagnosed and likely societal burden, therefore, is even greater.”

- NIH Consensus⁸

Early Intervention

Early intervention appears to reduce the severity and prevalence of long term symptoms [Uzzell¹, Zazler⁹]. There are presently a number of studies under way relating to early intervention such as that done by Dr. Jocelyn Lacroix at the G.F. Strong Centre. In addition, studies by Dr. Mittenberg in Florida and Dr. Ponsford at Monash University, Melbourne Australia. There seem to be consensus that early intervention is positive but it is too early to measure the precise value of such programs.

Presently there are a few follow-up intervention programs in Canada, although hit and miss. There is Dr. Alan Finlayson in Ontario and Dr. Lacroix' program at VGH/GF Strong, Vancouver. I have not been able to locate any such program in the United Kingdom or Hong Kong. Over all, these programs can be described as experimental and rare.

- Dr. Finlayson¹⁰, Dr. Rose¹¹, Dr. Lacroix¹², Recovery Magazine¹³, Ms. Chow¹⁴



There is theoretically such a program in Quebec, providing the diagnosis is made and clearly noted in hospital. The Quebec Brain Injury Association approached hospitals to bring this requirement to their attention.

- Guy Coallier⁴⁸

There is in my experience a general human tendency to deprecate the symptoms of all head injuries, in particular mild head injuries, unless there are accompanying physical signs. Clearly there are some individuals for whom MTBI marks the onset of severe disability and financial loss. The legal system is struggling with the confusion surrounding MTBI.

I contacted knowledgeable professionals in all provinces, Hong Kong, United Kingdom and the United States to ask just how their communities were responding to MTBI. Over several months, many replied but a few did not⁴⁹. (I believe the responses are reasonably representative but it would be desirable to establish a clear protocol and dialogue with all jurisdictions.) The individuals who responded are in themselves excellent resources as being some of the most knowledgeable and experienced people in their respective communities. I asked several questions:

Question 1. Are mild traumatic brain injuries in [jurisdiction] treated any differently than any other injury? How would they generally be approached in the initial acute hospital and medical stage? Early on, do they get treatment and rehabilitation?

Without exception, all correspondents responded that early health care in their area was very good. Emergency care was provided for persons with mild traumatic brain injury. However, in connection with mild traumatic brain injury, the universal response was:

- a) it often was not recognized; or
- b) if it was recognized, the patient was sent home to the care of the family anyway.

It is clear that Anglo-American/Canadian society provides a patchwork of services for the care and rehabilitation of persons following traumatic brain injury (one of which is the legal system).



Typically, there is a public health care system such as in Canada, U.K, Hong Kong or a public/private health care system such as in the U.S., Hong Kong and that which is developing in Canada. It appears that all persons who suffer brain injury (mild or otherwise) are eligible for emergency/acute care in all jurisdictions. Typically it was reported the public/private health care acute stage ends abruptly for those who suffer traumatic brain injury. Thereafter, the second level of coverage, if it exists, becomes crucial. This is typically private insurance, or workers' compensation, or automobile related rehabilitation insurance. In all jurisdictions responding, while there is public health funding, there are many other fee payers such as the foregoing. Individuals suffering a mild traumatic brain injury (or a severe one for that matter) in jurisdictions which do not have one of the foregoing do not generally receive much rehabilitation or care unless they have this secondary coverage. Such care that they do receive must be found within the "public system," which is reported to be always over-strained, or legal action.

The most common source of brain injury is automobile related and automobile coverage schemes are fundamental to caring for survivors of traumatic brain injury.



Question 2. Is there a system of legislative compensation and/or rehabilitation for persons who suffer traumatic brain injuries?

TABLE 1

	Public Health Insurance	Tort	No Fault Rehab/Auto	All No Fault Auto	Comments
CANADA					
Nfld.	■	■	■	□	
P.E.I.	■	■	■	□	
N.S.	■	■	■	□	auto 25,000
N.B.	■	■	■	□	auto 50,000
P.Q.	■	■	■	■	no-fault auto
Ont.	■	■	■	■	100/1,000,000 if catastrophic
Man.	■	■	■	■	no-fault MPIC auto
Sask.	■	■	■	■	no-fault S. gn. insurance auto
Alta.	■	■	■	□	15,000 auto v. low rehab \$
B.C.	■	■	■	□	150,000 rehab auto
OTHER					
U.K.	■	■	□	□	no no-fault vehicle auto private pay or NHIS
Hong Kong	■	■	□	□	public and private health insurance
U.S.	□	■	some ■	□	public mostly private insurance. 50 states, various auto schemes

■ = Yes □ = No

Question 3. Do persons with mild traumatic brain injuries, as defined, normally have access to the systems?

All responses indicated a criticism of access to services for survivors of MTBI after the initial hospitalization. A sample of the responses follows:

Ontario: There was a period, maybe 10 years ago, when suspected brain injury risk cases were admitted to hospital for 24 hours for observation, however, they are now discharged with a head

injury routine sheet. In larger centres, mild traumatic brain injuries may be seen in follow-up if symptomatic and recognized. There are several such programs in Ontario, however:

“There is a place in the ABI program for mild brain injury but resources are limited. Programs are often over-subscribed and there is a tendency for mild brain injuries to receive evaluation but little treatment. In Ontario the best rehabilitation would be in automobile related cases and next for workers.”

“There is no such formal program but there is some general agreement in most centres about appropriate management of mild traumatic brain injury, generally if there are key neurological/neurosurgical signs and the patient is admitted and treated symptomatically. In the absence of such indicators, a general systems review and various other examinations (deemed necessary) are carried out and the individual is generally discharged to the care of a significant other with instructions for a "head injury routine". The latter involves monitoring them for signs or symptoms, periodic waking, etc.”

- Dr. Alan J. Finlayson¹⁶

Eligibility for benefits is determined by the severity of the injury. Only catastrophic injuries (GCS between 3 and 9) received the full rehabilitation program available under the automobile rehab scheme. Mild brain injury is generally considered non-catastrophic, in which case there is a bar against proceedings for damages and rehabilitation is limited. It is possible to access the full rehabilitation program including \$1,000,000 rehabilitation limits if after 3 years a person has sustained a combination of impairments which results of 55% impairment to the whole person



under the AMA's guide to evaluation of permanent impairment. It is OBIA's experience that many physicians are skeptical although this is changing.

- Ontario Brain Injury Association¹⁷

In Prince Edward Island, although survivors are not treated differently, there are limited specialists available and most have to leave the province to go to Halifax or Moncton.

- Eugene Rossiter¹⁸

In Nova Scotia, there are very limited services for those suffering any traumatic brain injury.

The automobile rehabilitation limit is \$25,000 and the insurer just pays that out in serious cases and closes the file. Otherwise, insurers are somewhat skeptical. The balance of services are private pay, the Nova Scotia Brain Injury Association has one program to assist but obviously is limited.

- Sean Layden¹⁹

In New Brunswick, the New Brunswick Brain Injury Association is concerned that many mild injuries are not addressed in hospital, do not receive care afterwards either. There is usually no insurance available unless you are involved in an automobile mishap. There is a standard rehabilitation policy for automobiles in the province of New Brunswick which is \$50,000.

- Anne Snow²⁰

- Michael B. Murphy²¹

Dr. Leckey, from Stan Cassidy Centre for Rehabilitation in New Brunswick:

“... There is not a systematic approach for evaluation for such individuals. I believe the vast majority of such individuals do not get identified early on and do not have appropriate treatment early on. Unfortunately the term post concussive syndrome has become very popular and people appear to be lumped into that syndrome with all of their cognitive complaints, including concentration trouble, memory trouble, visual difficulties, dizziness, etc., and only when it does not improve in three months do people perhaps consider mild traumatic brain injury.”



He writes that there is \$50,000 insurance for therapy and medicine after acute care. There is decreased access to systems possibly due to delay and diagnosis, lack of specialists and special expertise in the area and skepticism on the part of insurance companies. Persons involved in the public system, even though identified and appropriately referred, are subject to long waiting lists (this only differs from the more moderate and severe injuries in that recognition is in them much earlier and more expertise is available).

- Dr. J.R. Leckey²²

The suspicion of mild traumatic brain injury often comes from an experienced litigator rather than from the medical profession. Family physicians seem slow to recognize it. It seems to be infrequent that persons get early treatment and rehabilitation following mild traumatic brain injury. The only legislative system for compensation is workers' compensation and automobile rehabilitation benefits. There are excellent neurological clinics for diagnosis and initial treatment, but they offer little benefit beyond that. Ultimately, little is available because of financial constraints unless the injury arises in the context of a workers' compensation or automobile claim.

- John Barry²³

The Manitoba system provides good follow-up care and rehabilitation for persons with automobile-related injuries if they are recognized as such. It is always difficult to recognize mild traumatic brain injury and provide prompt and adequate care. Apart from the automobile coverage, it is more problematic. Although WCB will provide such care, it does not have a special unit, nor does Manitoba Health.

- Joan Fortier²⁴



The Manitoba Brain Injury Association does not offer professional advocacy but makes referrals. Anecdotally, they express concern that the people they see are not getting services and assistance following mild traumatic brain injury. Many are not initially diagnosed.

- Gordon Sones²⁵
- Ron Burkey²⁶

Quebec: All traumatic brain injury types (mild, moderate, severe) are theoretically treated the same. In fact, survivors go through 4 stages of re-adaptation, depending on severity. As each case is different, it might be that a person with MTBI will not go through all the stages of rehab, and the duration of each of these stages is variable in each individual. Phase 1 is the initial medical treatment; phase 2 concentrates on functional re-adaptation; phase 3 involves re-integrating the traumatic brain injury survivor into the family circle and re-entering society.; phase 4 involves maintaining the assets achieved.

- Michel Deschenes⁴⁷

British Columbia offers \$150,000 for automobile-related rehabilitation. Its workers' compensation system (no limits) has a special brain injury unit intended to facilitate rehabilitation. G.F. Strong is a publicly funded rehabilitation facility associated with the major trauma hospital in Vancouver, British Columbia. There is full access to the courts except for work-related cases.

British Columbia has a pilot "early intervention" program at G.F. Strong Rehabilitation Centre.

- Dr. Jocelyn Lacroix²⁷

Whether by virtue of the British Columbia Brain Injury Association, or professionals practicing in the field of brain injury in British Columbia, or possibly this and other conferences, there has been substantial recognition in this province of the issues surrounding mild traumatic brain



injury. A number of conferences have focused on the legal profession as well as the brain injury community. In the fall of 1998 the Insurance Corporation of British Columbia devoted an entire issue of its “Recovery” magazine (150,000 copies) to the issue of mild traumatic brain injury. The Insurance Corporation of British Columbia has expressed concerns about the number of mild traumatic brain injury cases. Rehabilitation may be available although ICBC remains skeptical of the majority of cases and there is no rehab coordinator assigned to “mild” injuries.

– *Recovery Magazine*²⁸
– Conferences (PCBIC, TLABC, CLE)²⁹

In the United States, (as elsewhere), there is a patchwork of services available, with comparatively heavy reliance upon the tort system. Should injured survivors be taken to a major trauma hospital, the chances of follow-up and rehabilitation are increased.

There are many conferences and publications in the United States dealing with this injury issue and awareness is obviously increasing dramatically. Prejudices of the general population are still against the existence of serious long-term effects following mild traumatic brain injury.

- Bruce H. Stern³⁰, Nathan Zazler³¹, NHIF³², NIH Consensus³³

United Kingdom. Dr. Martyn Rose, consultant in neuropsychiatric rehabilitation, Northampton, co-founder and vice-chairman and medical advisor to Headway Northampton, writes:

“The service is exceptionally patchy and in the majority of areas, cases of mild head injury will attract no worthwhile services at all. A significant proportion will be completely missed. Our problem is that rehabilitation services are still under-developed although improving ... My own experience is that person with even severe ABI ... if they develop symptoms of mental ill health, will be diagnosed of course, according to the closest psychiatric category and the possibility or probability of the problems being due to organic brain damage will be completely ignored.”

“Our national health service has made some efforts to improve the management of people with ABI but in my view our major problem is that when the national NHS was established in 1948, people with ABI did not survive very long and so there was no recognized group of people with this problem to deal with.”



“The situation is somewhat different if you have had a motor vehicle accident, accident at work or your problem results from medical negligence. If your injuries are the result of someone else’s fault, then you are able to obtain redress through the private sector ... if you have your mild brain injury recognized in the first place and then find the specialist who is prepared to offer you the treatment.”

- Dr. Martyn J. Rose³⁴

Neil Sugarman, a specialist litigation solicitor with extensive experience in brain injury litigation, Manchester, U.K., writes that in his experience, mild brain injury slips through the net. A family will rarely raise the issue with medical staff and it often simply gets lost. Although the National Health Service has a good reputation in intensive care situations, once the critical stages are overcome, the same standard of care and follow-up are not often achieved (whether for severe or milder brain injury). It is his experience that general medical practitioners may be dismissive of the signs and problems and often it is not until the individual takes legal advice in contemplation of claim that the full assessment takes place at all. Unfortunately, not all solicitors in England are fully trained and equipped to recognize such problems and obtain the appropriate referrals and evaluations. He finds even the appropriate medical experts may be dismissive or defensive. Third party insurers are inevitably skeptical and difficult.

- Neil Sugarman³⁵

Michael Turner, lawyer, Bromley, U.K., suggests the emergency departments in the United Kingdom are seriously under-staffed and many of those are junior doctors who are over-worked and that the triage system has the effect of placing mild traumatic brain injuries at the back of the queue. It is his experience that it is “almost always” missed by the receiving hospital. In any event, recognized or not, there is “virtually no brain injury rehabilitation available within the National Health Service, saving cases of severe TBI or stroke.” He says the West Kent Health Authority, population of 650,000, has but one neuropsychologist. It is his experience, likewise,



that persons with mild traumatic brain injury do not access the rehabilitation system for whatever reason.

- Michael Turner³⁶

Hong Kong. Shelley M. Chow, OT (an independent consultant and a truly exceptional resource for those needing services, with 22 years of practice in Hong Kong) is concerned that initially mild traumatic brain injury is not recognized. In Hong Kong, however, closed head injuries may be held in hospital for observation more carefully than in the past due to litigation concerns. A person suffering traumatic brain injury at work or in traffic accidents are covered by rehabilitation compensation schemes and treated by the public hospital authority. Typically, unless rehabilitation treatment is sought out after discharge, it is sparse. Funding is not the major issue as treatment fees are relatively low and are often waived in any event. Most brain injuries are treated in the public sector and not by the HMO's who tend to dominate corporate and private health care in Hong Kong. There is no early intervention program.

- Shelley M. Chow³⁷

Question 4. In the absence of a provable tort, is there any compensation or rehabilitation, and if there is a provable tort (presumably covered by private insurance), how is the response to those persons who suffer mild traumatic brain injuries? What kind of rehabilitation, care and compensation do they receive? Is it any different than in more moderate to severe brain injuries?

In all jurisdictions, in the absence of a private insurer, workers' compensation, or an automatic rehabilitation plan under automobile, there is reportedly little access to ongoing care and rehabilitation for survivors of mild traumatic brain injuries, unless they have access to the courts.

- see Table 1, page 6



Most jurisdictions had programs for rehab of all survivors of tbi – such as WCB or autoplan – regardless of fault. But there was much suggestion that people with mild tbi did not readily access these systems. (It is not clear whether that holds true or not in Manitoba, Saskatchewan or Quebec.) It was my impression that overall it was a rarity for MTBI survivors to receive rehabilitation even if they did not need to litigate to establish their rights.

Jurisdictions with “no fault” schemes are better at rehabilitation than compensation.

Compensation for MTBI in these systems may be low.

- Guy Coallier⁴⁸

Question 5. How are these “mild” injuries received by the Courts in your experience? Are you aware of any judgments which might reveal the attitude of your judiciary to “mild” tbi cases (or refer one to someone)?

In all jurisdictions, there is still access to the courts for compensation for injuries caused by another except: (1) work-related injuries are usually excluded (not in all U.S. jurisdictions); and (2) automobile-related injuries excluded by no-fault in, eg: Saskatchewan, Manitoba and Quebec. (3) In some jurisdictions, automobile-related injuries are excluded if they are not “serious” enough to meet a threshold, such as in Ontario and some U.S. states. There may still be rehab – but in eg. Ontario, mild tbi falls into a different stream. In most jurisdictions, legal cases involving mild traumatic brain injuries are treated like any other litigation. However in some jurisdictions, insurers are making extra efforts to avoid compensation. This may include more vigorous defence, trial by jury or other techniques. In British Columbia there is the special brain injury unit within the Insurance Corporation of B.C. Where trial is by judge alone even if the individual can prove the case, mild traumatic brain injury cases are generally under-compensated. Trials by jury are unpredictable. It would seem that the court system reflects the



inherent social/human bias against legitimizing mild traumatic brain injury by awarding survivors substantial compensation. There is a specialized Judge hearing traumatic brain injury cases in Hong Kong.

A survey of the Canadian jurisdictions done by use of the Quicklaw database produces these statistics:

TABLE 2

PROVINCE	QUICKLAW SEARCH BY	“mild traumatic brain injury”	“brain injury”	“head injury”	mild /5 head
B.C.	Total Civil	47 (1993+)	432 (1970+)*	719 (1970+)*	101 (1981+)
	Total Civil Since 95	44	210	255	47
Alberta	Total Civil	2 (1996+)	78 (1986+)	88 (1976+)	16 (1980+)
	Total Civil Since 95	2	49	41	10
Saskatchewan	Total Civil	0	27 (1987+)	26 (1980+)	2 (1986+)
	Total Civil Since 95	0	18	15	1
Manitoba	Total Civil	0	7 (1984+)	18 (1981+)	1 (1997+)
	Total Civil Since 95	0	4	6	1
Ontario	Total Civil	5 (1992+)	182 (1970+)*	337 (1970+)*	2
	Total Civil Since 95	4	78	107	2
New Brunswick	Total Civil	0	23 (1973+)	56 (1980+)	12 (1979+)
	Total Civil Since 95	0	13	25	6
Nova Scotia	Total Civil	4 (1994+)	36 (1972+)	49 (1971+)	5 (1972+)
	Total Civil Since 95	3	15	26	2
PEI	Total Civil	0	4 (1986+)	4 (1986+)	0
	Total Civil Since 95	0	1	1	0
Newfoundland	Total Civil	0	5 (1994+)	18 (1986+)	1
	Total Civil Since 95	0	4	9	1

* - The Quicklaw database theoretically dates back to 1931, however, we have assumed no bi cases pre-1970
There are a number of limitations to the use of this data:

1. It is a search for “words” in a judgment
2. The case may use the words without actually being a case relating to compensation for personal injury.
3. Ontario has had various different automobile insurance schemes from time to time.
4. Jury verdicts are not included, only written judgments.
5. The database is relatively new and may be incomplete and the quality may vary from province to province.

Ontario and British Columbia: Reviewing just Ontario and British Columbia, there seems an unusual disparity between the number of MTBI cases in Ontario vs. BC, with a population ratio



of about 3:1. Ontario has had a variety of auto insurance schemes pre-1993, 1994-Oct96 and after November 96. It is beyond the scope of this paper to sort out the myriad of legal/rehab issues that these changes have created. However, it appears there is presently no right to sue for automobile-related injuries unless there is:

- “(a) permanent serious disfigurement; or
- (b) permanent serious impairment of an important physical, mental or psychological function. [1996, c.21, s.29]”

- Ontario Motor Vehicle Insurance Schemes³⁸
- Ontario *Insurance Act*, s.267³⁹

This presumably frustrates the right to bring action for mild traumatic brain injury, or does it ...?

The Ontario Brain Injury Association (and Dr. Barry Willer) published “Adding Insult to Injury ... A Report on Automobile Insurance Legislation in Ontario and how it is impacting survivors of Traumatic Brain Injury” [see website: www.obia.on.ca/bill59.html].

Physical Injuries Take Priority

It is significant how the Rehabilitation Regulations reflect the foregoing – for example:

- “ ‘catastrophic impairment’ means,
- (a) paraplegia or quadriplegia,
 - (b) amputation or other impairment causing the total and permanent loss of use of both arms,
 - (c) amputation or other impairment causing the total and permanent loss of use of both an arm and a leg,
 - (d) total loss of vision in both eyes,
 - (e) brain impairment that, in respect of an accident, results in,
 - (i) a score of 9 or less on the Glasgow Coma Scale, as published in Jennett, B. and Teasdale, G., *Management of Head Injuries*, Contemporary Neurology Series, Volume 20, F.A. Davis Company, Philadelphia, 1981, according to a test administered within a reasonable period of time after the accident by a person trained for that purpose, or
 - (ii) a score of 2 (vegetative) or 3 (severe disability) on the Glasgow Outcome Scale, as published in Jennett, B. and Bond, M., *Assessment of Outcome After Severe Brain Damage*, Lancet I:480. 1975, according to a test administered



- more than six months after the accident by a person trained for that purpose,
- (f) subject to subsections (2) and (3) any impairment or combination of impairments that, in accordance with the American Medical Association's *Guides to the Evaluation of Permanent Impairment*, 4th edition, 1993, results in 55 per cent or more impairment of the whole person, or
 - (g) subject to subsections (2) and (3), any impairment that, in accordance with the American Medical Association's *Guides to the Evaluation of Permanent impairment*, 4th edition, 1993, results in a class 4 impairment (marked impairment) or class 5 impairment (extreme impairment) due to mental or behavioural disorder;"

then

- “(2) Clauses (f) and (g) of the definition of “catastrophic impairment” in subsection (1) do not apply in respect of an insured person who sustains an impairment as a result of an accident, unless,
- (a) the insured person’s health practitioner states in writing that the insured person’s condition has stabilized and is not likely to improve with treatment; or
 - (b) three years have elapsed since the accident.”

and

- “19. (1) The sum of the medical and rehabilitation benefits paid in respect of an insured person shall not exceed, for any one accident,
- (a) \$100,000; or
 - (b) if the insured person sustained a catastrophic impairment as a result of the accident, \$1,000,000.”

Lawyers are now attempting the “back door” route.

- Finlayson⁴⁰, Oatley⁴¹

It is interesting that at the same time a consensus has developed that a prompt (I would argue inclusive) diagnosis, follow-through and early intervention are beneficial, that a major provincial scheme is entrenching an apparently backward view, ie: excluding mtbi issues at least until 3 years have lapsed and “mild” has become functionally catastrophic.

In British Columbia, our auto regulations and ICBC are not particularly friendly to MTBI – most rehab funding is “discretionary.” – but they do not formally exclude MTBI.



Reception of MTBI in British Columbia

However, what happens when the MTBI gets to Court in BC? In BC the difficulty is proving the injury exists. For a more complete discussion, I have appended a recent presentation from a September 2000 Continuing Legal Education seminar.

- Stewart & Webster - Appendix I hereto⁴²

The onus of proving the injury and consequential loss is squarely upon the plaintiff.

- *Anderson v. Bricknell*⁴³

The burden of proof can be very difficult to meet for an invisible injury which is not well understood by science and which is subject to the worst of human prejudices.

Once it is proven there is still much skepticism. In a recent judgment of the B.C. Supreme Court, the trial judge said:

“[316] ... I find as well that he suffered a mild traumatic brain injury.

...

[318] I do not, however, attribute Mr. Musto’s cognitive deficits solely to the brain injury he sustained as the result of the accident. The evidence amply supports the conclusion, I find, that factors unrelated to the accident – depression related to his job losses and inability to obtain employment similar in status and pay to that which he had at Belkin Packaging – have contributed to the difficulties he has had with his cognitive functions.”

- *Musto v. Whistler*⁴⁴

Mr. Musto was awarded relatively low damages.

In Ontario, Roger Oatley recently (Feb 2000) obtained a jury verdict of over \$1,000,000 (automobile related MTBI / Derek Watson).

- Oatley⁴¹



Hong Kong and United Kingdom use a “meat chart” approach to general damages (non-specific, non-financial losses).

United Kingdom:

“(c) Moderate Brain Damage

C1-007 This category is distinguished from (b) by the fact that the degree of dependence is markedly lower.

- (i) Cases in which there is moderate to severe intellectual deficit, a personality change, an effect on sight, speech and senses with a significant epileptic risk.

TOP	£ 90,000	£ 93,850
BOTTOM	£ 65,000	£ 67,780

- (ii) Cases in which there is a modest to moderate intellectual deficit, the ability to work is greatly reduced if not removed and there is some risk of epilepsy.

TOP	£ 65,000	£ 67,780
BOTTOM	£ 40,000	£ 41,710

- (iii) Concentration and memory are affected, the ability to work is reduced, where there may be a risk of epilepsy and any dependence on others is very limited.

TOP	£ 40,000	£ 41,710
BOTTOM	£ 20,000	£ 20,860

*** (d) Minor Brain Damage**

C1-008 A good recovery will have been made. The plaintiff can participate in normal social life and return to work but restoration of all normal functions is not implicit. There may still be persistent deficits such as poor concentration and memory or disinhibition of mood which may interfere with lifestyle, leisure activity and future work prospects.

Considerations affecting the level of the award:

- (i) Extent and severity of the initial injury.
(ii) Extent of any continuing and possibly permanent disability.
(iii) Extent of any personality change.

TOP	£ 20,000	£ 20,860
BOTTOM	£ 7,500	£ 7,820

(e) Minor head Injury

C1-009 These are cases where brain damage, if any, will have been minimal.

Considerations affecting the level of the award:

- (i) Severity of initial injury.
(ii) Period of recovery from severe symptoms.
(iii) Extent of continuing symptoms at trial.
(iv) Headaches.

TOP	£ 6,000	£ 6,260
BOTTOM	£ 1,000	£ 1,040



(f) Established Epilepsy*Grand Mal*

TOP	£ 65,000	£ 67,780
BOTTOM	£ 45,000	£ 46,920

Petit mal

TOP	£ 55,000	£ 57,350
BOTTOM	£ 25,000	£ 26,070

The facts which affect the award will be:

- (i) The existence of other associated behavioural problems.
- (ii) Whether attacks are successfully controlled by medication and the extent to which the need for medication is likely to persist.
- (iii) The extent to which the appreciation of the quality of life may be blunted by that medication.
- (iv) The effect on working and/or social life.”

- Judicial Studies Board guidelines⁴⁵

* It is clear that “minor” brain damage and MTBI may not correspond.

Hong Kong:

“Serious injuries	HKD \$400,000	-	\$540,000
Substantial injuries	\$540,000	-	\$660,000
Gross disability	\$660,000	-	\$1,000,000
Disaster	\$1,000,000	-	upwards”

Summary

It is not just B.C.; all our neighbours are struggling with the same question of how to reduce the number of poor outcomes following what seems to be a minor or transient brain injury. We do know that:

- * we all have access to quality emergency health care;
- * we all have access to a patchwork of rehabilitation or compensation or compensation systems which are theoretically available following tbi;
- * few people have much rehabilitation or care following a minor traumatic brain injury;
- * some people do very poorly after what appears to be a minor or transient brain injury;



- * the legal community is struggling to deal with this issue in the context of compensation.

My Suggestion

1. Adopt an inclusive definition such as the ACRM (American Congress of Rehab Medicine) definition which does not require documented loss of consciousness but includes any disruption of mental state associated with TBI and utilize grading such as we are familiar with for sports “concussions” (Malec referring to Esselman & Uomoto.)

The use of an inclusive definition eliminates “pre-judging” the injury. I would argue that a brain injury is a brain injury subject only to degrees. The inclusive definition would shift more individuals into the brain injury category, subject of course, to grades of severity and risk. Instead of instant judgement in the overworked emergency room, all those with this potentially catastrophic injury would receive equal consideration. Some would receive urgent hospital care and some would only require follow-up, possibly a different kind of care.

We should avoid the use of the term “mild.” It was intended to refer (vaguely) to a gradient of acute injury but has become the bulwark of a system that is resistant to dealing with all those who suffer traumatic brain injuries. It implies no serious injury at all and is imposed at a time (emergency room) when it is impossible to say what the long term outcome might be.

2. Refine and adopt strategies for early intervention for all traumatic brain injuries appropriate to the grade of risk. An inclusive definition would only mandate the slightest (and least expensive) follow-up in some tbi cases; but in the others it would allow quick reaction to reduce serious developing problems.



3. Fight stereotypes and prejudices. We do not know why some people suffer such poor outcomes from the lower severity tbi – until we do, we should be most reticent to equate functional problems to “inadequate” personality. There are many vested interests which would prefer to avoid dealing with this problem, and stereotyping supports their respective positions. These vested interests are not just insurance companies but all those who wish a share of society’s resources.

4. The legal system is struggling to deal with the lack of scientific knowledge. It is very difficult to prove legal or factual causation (or to defend against it) if a problem is not understood by science. The trial process can and does resolve individual problems at great cost (3 – 4 weeks in trial). However, that resolution is not always favourable to the survivor. Someone may be severely impaired and their life may be in ruins but still fail to prove that “MTBI” claim or gain adequate compensation. This outcome is usually catastrophic. The perpetuation of the term “mild” is not helpful to anyone in this system. The term is no more helpful to the surprised insurance company ordered to pay \$1,000,000 in damages than to the totally disabled plaintiff who is under-compensated for his losses. It does none of us any good and should not be used. It would be easier if we used unloaded language such as Grade I, II, etc.

The legal system is a fundamental component of obtaining compensation and assistance for brain injury survivors in all areas surveyed, and it is struggling to meet its obligations in an era of scientific uncertainty. Please do not make it worse.

5. I respectfully adopt the words of Bruce Stern⁴⁶, a neurolawyer from New Jersey:

“Our civil justice system, however, is nothing more than a microcosm of society at large. The biases encountered by individuals with acquired



traumatic brain injury in the civil justice system are no different than the biases in many instances this population encounters in many aspects of their ordinary lives. Our educational system encourages children to be, and rewards them for being the best and brightest. It is therefore not surprising that those with acquired traumatic brain injury do not advertise these disabilities, rather denying and disguising their limitations as best as possible.”

Submitted to the National Conference on Brain
Injury, November 2000, Vancouver, British
Columbia, Canada.



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16. Dr. Alan J. Finlayson, *supra*.
17. Ontario Brain Injury Association, PO Box 2338, St. Catherines, Ontario
18. Eugene Rossiter, Stewart McKelvey Stirling Scales, 65 Grafton Street, Charlottetown, PEI
19. Sean Layden, Boyne Clarke, Box 876, Dartmouth Main, Nova Scotia
20. Anne Snow, Executive Director, Brain Injury Association of New Brunswick, 527 Beaverbrook Crt, Fredericton, New Brunswick
21. Michael B. Murphy, Murphy Collette Murphy, 300-777 Main Street, Moncton, New Brunswick
22. Dr. J.R. Leckey, M.D., F.R.C.P.C., Stan Cassidy Centre For Rehabilitation, 180 Woodbridge Street, Fredericton, NB
23. John Barry, Barry Spalding Richard, Box 6010, Sta. A, Saint John, NB
24. Joan Fortier, Manager, Manitoba Public Insurance Corporation, 234 Donald Street, Winnipeg, Manitoba

25. Gordon Sones, Manager, Neuro Recovery Services, Occupational Rehabilitation Group, 825 Sherbrook Street, Winnipeg, Manitoba
26. Ron Burkey, Manitoba Brain Injury Association, 825 Sherbrook Street, Winnipeg, Manitoba
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MILD TRAUMATIC BRAIN INJURIES

CLE Course:
Personal Injury: Medical Issues

Scott B. Stewart
R. Brian Webster

I. Introduction

In recent years, numerous allegations of brain injury have been made in personal injury litigation. It often appears the allegation of “head injury” appears in Statements of Claim almost as though such were part of the boiler plate. “Experts” of all varieties have surfaced and much time is taken up in our courts dealing with their qualifications and the relevance of their testimony in the context of alleged brain injuries. I.C.B.C. has created its own Head Injury Department to deal specifically with allegations of brain injury. Numerous courses have been presented throughout North America, particularly British Columbia, relating to brain injuries and specifically to the topic of mild traumatic brain injuries. Those courses are often presented over the space of two or three days. Our attempt here is to deal with the topic of mild traumatic brain injuries (mtbi). This topic brings with it a complexity of issues. Given limited space and the numerous other injuries covered in this course, we will attempt to highlight some of the more seminal issues relating to mild traumatic brain injury.

With respect to the implications of the Supreme Court of Canada decision in *Athey v. Leonati*, [1996] 3 S.C.R. 458; 140 D.L.R. (4th) 235. it is the writers’ view that, while numerous decisions of the Supreme Court of British Columbia refer to *Athey* in the context of dealing with allegations of mild traumatic brain injury, in fact, *Athey* has had little impact on the legal analysis applicable to such injury as rarely, if ever, is there an issue of a cause of the mtbi other than the tortious event (the accident). Rather the issue is whether there has or has not in fact been a mtbi of ongoing consequence. We will attempt to address the difficulties occasioned in proving or disproving an injury that displays little in the way of objective signs. We will review some mtbi cases to illustrate the limited applicability of the tortious/non-tortious causal analysis in *Athey* to cases in which the primary issue is whether, in fact, there has been or has not been a mtbi of ongoing consequence.

II. What is a Mild Traumatic Brain Injury ?

Neurosurgeons and neurologists classify brain injuries at the acute state as trivial, mild, moderate, severe, catastrophic and variations thereof based on certain criteria. These include: Glasgow Coma Scale scores, length of unconsciousness, period of post-traumatic amnesia, analysis of actual physical injury and other similar factors. The classification of brain injury as moderate to severe is relatively easy. However, the classification of brain injury as mild is fraught with much more difficulty, not the least of which is the controversy over the criteria to be applied in making such a diagnosis.

Although not universally accepted, most neurologists would classify mild head injury as one with a loss of consciousness of 20 minutes or less, a Glasgow Coma Scale of 13 to 15, post-traumatic amnesia of less than 60 minutes, all accompanied by normal neuro-radiological findings with no focal neurological deficits. However, the American Congress of Rehabilitation Medicine has accepted the following definition of mtbi:

“A traumatically induced physiological disruption of brain function manifested by *at least* one of the following:

1. any loss of consciousness;
2. any loss of memory for events immediately before or after the accident;
3. any alteration in mental state at the time of the accident (e.g., feeling dazed, disoriented, or confused); and
4. focal neurological deficit(s) that may or may not be transient.

The severity of the injury cannot involve:

- * loss of consciousness for greater than 30 minutes;
- * after 30 minutes, a Glasgow Coma Scale score less than 13; or
- * post-traumatic amnesia greater than 24 hours.”

A difficulty is the broad range of injury severity contained within this definition. Furthermore, it has been successfully argued that after point #3, the word “or” should have been used instead of the word “and”. In such event, this definition includes what would otherwise be thought of as a trivial injury involving only a brief period of confusion.

III. Recovery from a Mild Traumatic Brain Injury

Many people sustain trivial or mild brain injuries in the course of their lifetime. A concussion is considered to be a mild brain injury. Various studies have established that at least 400 to 500 people per 100,000 of the population have sustained at least one brain injury at some point in their lives. This likely significantly understates the number of people who have sustained brain injury as many brain injuries go unreported. Fortunately, the vast majority of people who have sustained brain injury quickly recover. Naturally, the more significant the signs of the type outlined in the above criteria, the less likely full recovery will occur in a short time, if at all. Even so, the vast majority of people displaying more significant of these signs still fully recover within a relatively short space of time.

However, in a small though significant number of individuals, symptoms continue for an indefinite period of time. In such instances the symptoms will be severe and consequences can be dramatic. These may interfere with vocational abilities, personal relationships and general well being leading to a significant loss of income and/or cost of care. In many cases, an individual will progress from an apparently simple concussion to develop a post-concussion syndrome of lasting consequence. In many cases, while there may be no hard evidence of organic injury to the brain, consequential symptoms including anxiety and other psychological

overtones will develop. Certainly, individuals with difficult lifestyles pre-accident are more likely to suffer more significant consequences post-injury.

IV. Proving a Mild Traumatic Brain Injury

As may be implicit from our discussion under the previous headings of “What is a Mild Traumatic Brain Injury” and “Recovery from a Mild Traumatic Brain Injury” is the fact that proving a mtbi can be extremely difficult. On the other hand, disproving such an injury can also be equally difficult when faced with subjective complaints as reported by the patient. As Mr. Justice Thackeray in *Anderson v. Bicknell* [1998] B.C.J. No. 1847(Q.L.) has clearly pointed out, however, the general rule of evidence in our courts continues to be that the onus of proving an injury and consequential loss is still upon the Plaintiff. In the absence of hard organic evidence such as CT or MRI scan readings or actual observable physical evidence of injury to the head such as a fractured skull, evidence of an injury will come from reports by the Plaintiff, his/her family, friends and co-workers. These lay witnesses will provide evidence of the changes in the plaintiff since the injury by contrasting the plaintiff’s before and after personality, functioning etc. The defence, of course, will concentrate on the Plaintiff’s functioning prior to the accident and take the position that nothing has changed. The difficulty for the Plaintiff is that often a brain injury exacerbates pre-existing idiosyncrasies, personal characteristics or traits. It is extremely difficult to prove a significant injury solely on the basis of the Plaintiff stating that, while he was temperamental before the accident, he is much more temperamental now. Most people have stressors in their lives that cause them difficulty. In the absence of neurological evidence, it is extremely difficult to sort out the effects of those stressors (including stresses caused by other injuries sustained in the same accident) from the effects of a mtbi. The degree to which pre-morbid traits such as depression, headaches and aggressive behaviour are proven to have existed before the injury may affect the Court’s decision as to whether a mtbi has occurred at all. Certainly, the pre-existence of these factors affect the level of compensation. As the cases reviewed below suggest, the issue for the court, once mtbi is established, is best described as one of compensation not causation.

Plaintiff’s will often rely on the evidence of various medical experts in proving mtbi. Commonly, for example, the plaintiff will retain a neuropsychologist to conduct neuropsychological testing in order to assess the Plaintiff’s functioning both cognitively and behaviourally. This evidence is fraught with difficulty in that it is limited to how a particular individual’s brain is functioning at the time of testing. While most neuropsychologists then attempt to give an opinion on why the individual’s brain is functioning in that manner at that particular time, that opinion tends to be based largely on the history he was given, which often comes from the Plaintiff, family and friends. In the absence of harder evidence such as neuro-imaging on CT scans or MRI, objective evidence of focal neurological deficits or well documented evidence of loss of consciousness or post-traumatic amnesia, the neuropsychologist may have to rely primarily upon subjective reports of lay people. Restricted to test data alone (in mtbi cases), the neuropsychologist faces difficult questions with respect to whether those test results are any different from what they would have been absent an injury. There are issues regarding the reliability of the norms employed in the testing and the effects of the plaintiff’s psychological state at the time of the testing. There is the issue of whether the psychologist is really addressing the ultimate question that must be answered by the court. Certainly neuropsychological evidence has come under greater scrutiny from defence counsel in recent years on the basis of reliability. For a much more thorough examination of this issue we would

refer you to an excellent paper presented by Vince Orchard at the Trial Lawyers Association Conference on Brain Injury Litigation held on February 4 and 5 of this year entitled “Challenging Expert Evidence in Brain Damage Cases”.

Nevertheless, people do sustain “mild” brain injuries from which they do not recover. Obviously this belies the term “mild”. Faced with the above difficulties it is extremely important that Plaintiff’s counsel not wait for Defence counsel to demand documentation pre and post-accident but that Plaintiff’s counsel immediately seek to obtain all relevant documentation in order to best understand the case that must be presented. Both you and your client should quickly become aware in detail of pre-accident functioning and any stressors or difficulties encountered before the injury so that a clear understanding can be had of how the Plaintiff is functioning after the accident in comparison to his pre-accident functioning. A further benefit in developing this information early is that there will be a clear understanding on your client’s part as to what is involved at an early stage rather than his having to attempt to reconstruct at a later stage and get himself in deep trouble by imagining things that did not happen. An example here is that a Plaintiff may say he cannot remember the accident or some period of time after the accident when in fact within a few days of the accident itself he had been expressing clear memory of the accident itself and the events immediately thereafter. Do not let your client allow his memory lapse due to the effluxion of time jeopardize his otherwise genuine case.

V. The Effect of *Athey*

Mr. Foye has very thoroughly outlined the effect of the *Athey* decision on causation issues in personal injury claims. We will not attempt to do any further analysis of that decision in this paper. However, our understanding of the *ratio* in the *Athey* decision is that in certain circumstances a tortfeasor will be held fully responsible for the totality of loss occasioned by his wrong doing even in the face of other non-tortious causes of an injury. As earlier stated, such issues seldom if ever arise within cases where a mild traumatic brain injury is alleged. Decisions involving an analysis of mild traumatic brain injuries often refer to and quote *Athey* but then simply address the question of whether there has or has not been a mtbi caused by the accident. Certainly, there is often consideration of individuals who have had pre-traumatic psychological problems but the analysis is then directed to determining whether the current problems simply are a continuation of those pre-existing psychological problems or are problems caused by and symptomatic of a mtbi. The court is determining whether there in fact has been a mtbi at all. In other words, the issue is not who caused the disc to pop but did the disc pop at all.

VI. Applying *Athey* in MTBI cases

The rule in *Athey* deals with analyzing the extent to which tortious and non-tortious causes are responsible for the plaintiff’s condition.

“The applicable principles can be summarised as follows. If the injuries sustained in the motor vehicle accidents caused or contributed to the disc herniation, then the defendants are fully liable for the damages flowing from the herniation. The plaintiff must prove causation by meeting the “but for” or material contribution test. Future or hypothetical events can be factored into the calculation of damages according to degrees of probability, but causation of the injury must be determined to be proven or not proven. This has the following ramifications.

1. If the disc herniation would likely have occurred at the same time, without the injuries sustained in the accident, then causation is not proven.
2. If it was necessary to have *both* the accidents *and* the pre-existing back condition for the herniation to occur, then causation is proven, since the herniation would not have occurred but for the accidents. Even if the accidents played a minor role, the defendant would be fully liable because the accidents were still a *necessary* contributing cause.
3. If the accidents alone could have been a sufficient cause, and the pre-existing back condition alone could have been a sufficient cause, then it is unclear which was the cause-in-fact of the disc herniation. The trial judge must determine, on a balance of probabilities, whether the defendant's negligence materially contributed to the injury." (p. 245).

In *Athey* the issue was whether the plaintiff's disc herniation was caused by injuries sustained in two mvAs or whether it was attributable to the plaintiff's pre-existing back problem. The TJ found that the two mvAs contributed to the subsequent disc herniation by 25 %. The SCC held that this fell outside the *di minimus* range and was therefore a material contribution. *Bonnington Castings Ltd. v. Wardlaw*, [1956] 1 All E.R. 615. The material contribution furthermore was not unreasonable. The SCC described the appeal as a straightforward application of the thin skull rule. The Trial Judge had erred in failing to hold the defendant fully liable for the disc herniation after finding that the defendant had materially contributed to it. "Once it is proven that the defendant's negligence was a cause of the injury, there is no reduction of the award to reflect the existence of non-tortious background causes." *Athey*, supra, at p.247.

In m/tbi cases typically there is not a non-tortious event one can point to as causing the injury. In *Athey*, one is comparing the condition of the plaintiff's spinal chord before and after the injury. Except in cases where there is identifiable brain damage before the accident, in addressing the issue of causation most brain injury cases do not involve a comparison of pre and post injury brains. Rather, the issue in m/tbi cases focuses on a two-step analysis: 1) whether or not there was a brain injury in the first place and if so, 2) what if any reduction should be made for any debilitating effects of a pre-existing condition. This second step is the analysis often referred to as a crumbling skull analysis. It deals with apportionment of damages, not causation:

"The so-called "crumbling skull" rule simply recognizes that the pre-existing condition was inherent in the plaintiff's "original condition". The defendant need not put the plaintiff in a position *better* than his or her original position. The defendant is **liable** for the injuries **caused** even if they are extreme, but need not **compensate** the plaintiff for any debilitating effects of the pre-existing condition which the plaintiff would have experienced anyway." (p. 244) *Athey* (my emphasis)

Boyle J. in *Anderson v. Berkeley* [1998] B.C.J. No. 2075 (Q.L.) (S.C.) found the plaintiff had suffered a m/tbi. In assessing the issue of causation the Court said at p. 16:

"No one disagrees the Plaintiff suffered a mild brain injury. No one disagrees that injury impaired the speed of his thought process and his

power of recollection. No one disagrees the Plaintiff's symptomology is that of depression.

...

I find the evidence shows pre-existing depression. **I do not find that depression can be attributed to non-tortious pre-collision events in a manner that would invoke *Athey v. Leonatti*, [1996] 3 S.C.R. 458.** (my emphasis).

I find *Pryor v. Bains* (1986), 69 B.C.L.R. 395, does apply, despite Dr. Crockett's uneasiness with the legal label "crumbling skull" and despite disapproval of the phrase by Major J. in *Athey*.

The pre-collision symptoms of depression were not rampant and they were of far less substance than is now apparent but they were manifest and they surfaced from time to time.

The defendant is liable only for that part of the disability fairly attributable to the Defendant's negligence. There is no evidence to show the Plaintiff would have been any less able in future than he has been in the past to fend off the disabilities attendant upon depression had there been no collision so the possibility of increased depression had there been no collision should be dealt with not as a contingency but as an issue of aggravation. I found the collision brought about a loss of the control that the Plaintiff had previously been able to exercise over overt symptoms. Prior to the collision the Plaintiff had been able to mask symptoms to others, if not to himself."

The Judge reduced the overall award by 10% for the active pre-injury depression. Thus, *Anderson v. Berkeley*, supra, illustrates that once a brain injury is found, the analysis shifts to compensation and the *Athey* analysis is unnecessary.

McGough v. Keuhn [1998] B.C.J. No. 1361 is another case where the Court found the plaintiff had suffered a mtbi. The plaintiff had a history of clinical depression for at least five years prior to the mva. The Court held the defendant was responsible to the extent to which he had made worse the plaintiff's pre-existing psychological difficulties. The Court found the mva resulted in an exacerbation of her pre-mva clinical depression so that the plaintiff continued suffering from ongoing anxiety and insomnia. The Court said:

"Pursuant to *Athey v. Leonati* and *Jonson*, [1996] 3 S.C.R. 458 (S.C.C.), I conclude that the percentage of the plaintiff's present condition attributable to the pre-existing condition (the "crumbling skull" argument) is 20 percent." (p.7)

Thus *Athey* was referenced for the principle that one is compensated to the extent one may have been put back in one's pre-incident condition. The crumbling skull principle was applied to the issue of damages. As in most mtbi cases where there is no evidence of pre-morbid brain

damage, in *McGough* the issue was whether there was a brain injury at all. The tortious/non-tortious causal analysis in *Athey* was not applicable.

In *Lyn v. Weatherston* [1997] B.C.J. No. 876(Q.L.) (S.C.), the Court identified the issues as follows: 1) Did the plaintiff suffer a mtbi? 2) Would the plaintiff have suffered emotional problems but for the accident? The Court found the plaintiff had suffered a mtbi. Under the heading “Issue-Two –Causation” at p. 7 the Court said:

“In this case, counsel for the defendants argues the award to the plaintiff must not place her in a better position than she would have been had the accident not occurred. In that regard, he relies upon a passage from the judgment in *Athey v. Leonati* (1996), 140 D.L.R. (4th) 235 (S.C.C.) Major J. said at page 243:

“The essential purpose and most basic principle of tort law is that the plaintiff must be placed in the position he or she would have been in absent the defendant’s negligence (the “original position”). However, the plaintiff is not to be placed in a position better than his or her original one. It is therefore necessary not only to determine the plaintiff’s position after the tort but also to assess what the “original position” would have been. It is the difference between these positions, the “original position” and the “injured position”, which is the plaintiff’s loss.”

In that regard, counsel points to the plaintiff’s pre-accident condition and says had there been no accident the plaintiff would have continued to suffer from headaches, depression, and a mood disorder. She would not have continued her work at the same level she was working before the accident and this must be taken into account in assessing the extent of the award to the plaintiff.”

Counsel for the plaintiff also relied on a passage from the same judgement. Major J. said at page 239:

It is not now necessary, nor has it ever been, for the plaintiff to establish that the defendant’s negligence was the sole cause of the injury. There will frequently be a myriad of other background events that were necessary preconditions to the injury occurring... As long as the defendant is part of the cause of an injury, the defendant is liable, even though his act alone was not enough to create the injury. There is no basis for a reduction of liability because of the existence of other preconditions: defendants remain liable for all injures caused or contributed to by their negligence.

He continued at page 240 as follows:

The law does not excuse a defendant from liability merely because other causal factors for which he is not responsible also helped produce the harm: Fleming, supra, at p. 200. It is sufficient if the defendant’s negligence was a cause of the harm.

I conclude the plaintiff would not have developed the symptoms and conditions that I have already noted, including severe emotional

difficulties, cognitive deficits or chronic pain, but for the accidents. No doubt her vulnerable position at the time of the accident was a factor that helped produce the harm but this will not result in a reduction in the award to which the plaintiff is entitled.”

In this case both plaintiff and defendant cited *Athey*. The passage cited by the defendant referred to a line of cases dealing with *intervening causes* that the SCC distinguished as inapplicable to the facts in *Athey*. The Trial Judge in *Lyn*, supra, did not comment on how this passage might apply to the facts of that case. Nor did the Trial Judge in *Lyn* comment on the excerpt cited by the Plaintiff. Instead, the Trial Judge simply concluded the defendant caused the plaintiff’s brain injury. The Trial Judge did not make any deduction for the fact the plaintiff was vulnerable before the accident. Thus, the Trial Judge in *Lyn*, having found the defendant caused the brain injury, without reference to principles of causation in *Athey*, awarded compensation based on a thin rather than crumbling skull plaintiff. The tortious/non-tortious causal analysis in *Athey* did not assist the court in this “typical” mtbi case.

VII. Conclusion

Increased mtbi awareness and diagnosis is reflected in increased mtbi litigation. Even if agreement is reached on the definition of mtbi, because of a lack of direct, objective medical evidence, issues of causation in mtbi are difficult. Much of the evidence comes from lay persons, the plaintiff, his friends and family. The medical experts can tell us what behaviour is consistent with a brain injury. However, this evidence may also be consistent with other psychological sources unrelated to physical brain damage. The SCC in *Athey* has been cited as a principle authority on the issue of causation in personal injury cases. While decisions involving mtbi may cite *Athey*, we have concluded that the analysis on causation in *Athey* is not useful in mtbi cases. In cases of mtbi the issue is whether there was a brain injury at all.